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RHODES COATS & BENNETT 909 GLENWOOD AVENUE POST OFFICE BOX 5 RALEIGH NC 27602 ART UNIT PAPER NUMBER

2755

DATE MAILED:

07/21/99

This is a communication from the examiner in charge of your application.

COMMISSIONER OF PATENTS AND TRADEMARKS	
OFFICE ACTION SUMMAR	Υ
Responsive to communication(s) filed on 3 + 6 9 9	
☐ This action is FINAL.	
Since this application is in condition for allowance except for formal matters, pr accordance with the practice under Ex parte Quayle, 1935 D.C. 11; 453 O.G. 2	osecution as to the merits is closed in 13.
A shortened statutory period for response to this action is set to expire	month(s), or thirty days,
Disposition of Claims	
Of the above, claim(s) 21-28	is/are pending in the application.
Of the above, claim(s) $24-28$	is/are withdrawn from consideration.
☐ Claim(s)	is/are allowed.
Claim(s)	is/are rejected.
☐ Claim(s)	is/are objected to.
☐ Claims	are subject to restriction or election requirement.
Application Papers	
☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-946	В.
☐ The drawing(s) filed on is/a	re objected to by the Examiner.
☐ The proposed drawing correction, filed on	is approved disapproved.
☐ The specification is objected to by the Examiner.	
☐ The oath or declaration is objected to by the Examiner.	•
Priority under 35 U.S.C. § 119	
Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 1	19(a)-(d).
☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority docu	
received.	
received in Application No. (Series Code/Serial Number)	
received in this national stage application from the International Bureau (
*Certified copies not received:	
☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §	, 119(e).
Attachment(s)	·
Notice of Reference Cited, PTO-892	
Information Disclosure Statement(s), PTO-1449, Paper No(s).	_ ,
☐ Interview Summary, PTO-413	
□ Notice of Draftsperson's Patent Drawing Review, PTO-948	
☐ Notice of Informal Patent Application, PTO-152	
·	WING BAGES

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DETAILED ACTION

1. REQUESTING PRIOR ART DOCUMENTS CITED BUT NOT SUBMITTED IN APPLICATION

2. Applicant has made reference to prior art throughout/in the application. Specifically, on pages 2-3 of the specification the "Rapid Development: Taming Wild Software Schedules" by Steve McConnell, Microsoft Press (1996) and "Workflow Strategies" by James Koblielus, IDG Books Worldwide Inc. (1997" "HELLO, WORLD! ParcPlace - Digitalk's Parts for Java 1.0, Software Development, February 1997 Lazar". Copies of these two listed publications are requested so that they can be fully considered.

Applicant is required to respond to this request, failure to do so could result in a NON-RESPONSIVE Office Action.

3. Non-patent prior art documents submitted on floppy disk in WordPerfect, Microsoft Word, PostScript, PDF, or ASCII formats are strongly encouraged to help reduce the paper burden on the Office and to facilitate the electronic searching and archiving of non-patent literature.

4. RESTRICTION

- 5. Groupings
- I. Claims 1-25 drawn to iconic task sequencing, classified in class 395, subclass 348.
- II. Claims 26-28 drawn to graphical interface display system, classified in class 345, subclass 326.
- 6. Subcombination, Usable Together

Inventions I and II are related as subcombinations disclosed as usable together in a single invention. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention II has separate utility such as providing versatility for displaying objects so that a user has optimal system information/accessibility. See MPEP § 806.05(d).

7. Conclusion

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art I) as shown by their different classification, 2) because of their recognized divergent subject matter, and/or 3) the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper.

8. Telephone Requirement

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During a telephone conversation with Mr. David Bennett on July 8, 1999, a provisional election was made without traverse to prosecute the invention of Group I, claims 1-25. Affirmation of the election must be made by applicant in reply to this Office action. Claims 26-28 withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a nonelected invention.

9. Claim Rejections - 35 U.S.C. § 102
The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102
that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless

- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.
- 10. Claims 1 and 14 are rejected under 35 U.S.C. § 102(e) as being anticipated by Carlson et al (U.S. Patent 5,623,592).

As to claim 1, Carlson teaches a method for sequencing a plurality of tasks performed or controlled by a computer (cause computer 102 to drive external devices to perform the schedule of operations according to the sequence of icons, c12 I29-31) comprising:

- a) placing task objects (copying or moving icons[representing task objects], c6 l36-41) in a directional field having a directional attribute (icon sequence region 806, c12 l21-31) wherein said task objects represent the tasks to be performed by said computer; and
- b) sequencing (perform the operations ... in the icon sequence, c12 I49-51) by said computer, of one or more of the task objects in the directional field based on the relative spatial location of the task objects in the directional field (sequence of the icons on time line 808 determines the order in which the operations will be performed, c12 I42-47) and the directional attribute of the directional field (sequencing rule, c13 I31-37).

As to claim 14, Carlson teaches a method for sequencing a plurality of tasks performed or controlled by a computer (cause computer 102 to drive external devices to perform the schedule of operations according to the sequence of icons, c12 I29-31) comprising:

- a) displaying on a computer display a user interface having a directional field (icon sequence region 806, c12 l21-31)
- b) placing in response to user input, task objects in said directional field (PLACING ICONS ON THE TIME LINE, c13 I44) wherein said task objects

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(Icons, c6 I11-17)represent the tasks to be performed by said computer (iconic programming process, Id.)

- c) selecting a directional attribute for said directional field (sequencing rule may be up-to-down or down-to-up, c13 l31-37)
- d) sequencing (perform the operations ... in the icon sequence, c12 I49-51) by said computer, of one or more of the task objects in the directional field based on the relative spatial location of the task objects in the directional field (sequence of the icons on time line 808 determines the order in which the operations will be performed, c12 I42-47) and the directional attribute of the directional field (sequencing rule, c13 I31-37).
- 11. Claim Rejections 35 U.S.C. § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 12. Claims 2-3 and 7-13 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Carlson et al (U.S. Patent 5,623,592).

As to claim 2, Carlson teaches (icon is inserted into the icon sequence at a position dependent on when the operation is to be performed relative to other operations, c21 l34-39) which corresponds to resequencing objects by changing the relative spatial location of the objects in the field.

As to claim 3, Carlson teaches (sequencing rule, c13 l31-37) which corresponds to the step of selecting a directional attribute for the directional field. It would have been an obvious modification of the sequencing rule as taught by Carlson to provide a selection for the sequencing (equivalent to the direction) rule.

As to claims 7-13, Carlson teaches (c14 I55 - c15 I28) kinetic and stacker icons which correspond to the recitations regarding the master objects, task objects, and the associations therein. It would have been obvious to modify the icon types as taught by Carlson to serve as various derived objects for structure and scope purposes.

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13. Claims 4-6 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Carlson et al (U.S. Patent 5,623,592) as applied to claims 1 and 8 respectively, and further in view of Gendron et al. (U.S. Patent 4,860,204).

As to claim 4 Gendron teaches (six relevant aspects of a Softron, c11 I23-34) which corresponds to task objects having one or more modifiable properties for controlling the behavior of the task objects. It would have been obvious to combine Gendron's teachings on Softron's with the iconic programming taught by Carlson because the Softron object facilitates flexibility and power in this visual development system.

As to claim 5 Gendron teaches a technique to include or exclude a task object in the directional field from a sequence (adding or subtracting (or both) State variables and/or Machines from the existing Softron, c17 l65-68). It would have been obvious to combine the teachings of Gendron with Carlson because the adding or eliminating of task objects is vital for program control.

As to claim 6, Gendron teaches (perform some calculation based on the value of the State and/or the value of parameters fed to it, c11 l23-34) which corresponds to at least one of the modifiable properties specifies the tasks to be performed by the task object. It would have been obvious to combine Gendron's teachings on the Softron's operations with Carlson's iconic programming because the ability to specify object processes gives users' greater command over details in the visual development environment.

As to claims 15-25 note the discussion of claims 2,4-13 above.

14. The prior art of record and not relied upon is considered pertinent to the applicant's disclosure. Each reference disclosed below is relevant to one or more of the Applicant's claimed invention.

"Widening 'world' of neural nets" Johnson, R. Colin (Electronic Engineering Times, n756, p35, July 26, 1993) which teaches the automatic connection of components in a visual programming environment;

U.S. Patent No. 5,850,548 to Williams which teaches the operations of components/iconic tasks with respect to scope and type functioning; U.S. Patent No. 5,767,852 to Keller et al. which teaches the control of processes via placing/arranging icons in a visual development environment.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to George Opie whose telephone number is (703) 308-9120.

ALVIN E. OBERLEY
SUPERVISORY PATENT EXAMINER

GROUP 2700